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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,948	08/26/2003	Takahiro Endo	SIC-03-028	4079
29863	7590	10/06/2004	EXAMINER	
DELAND LAW OFFICE			ELKASSABGI, HEBA	
P.O. BOX 69			ART UNIT	PAPER NUMBER
KLAMATH RIVER, CA 96050-0069			2834	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,948

Applicant(s)

ENDO ET AL

Examiner

Heba Elkassabgi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/26/03 & 01/30/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 19 is/are rejected.
- 7) ☒ Claim(s) 17-18,20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/26/03 & 01/30/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 08/26/04 and 01/30/04 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanehisa et al. (US Patent 6435622) and further in view of Iton (US Patent 6559564).
2. Kanehisa et al. discloses a bicycle hub (18,17) having a hub spindle (20) adapted to be mounted to a frame (12) of the bicycle (10). A hub body (22) disposed around the hub spindle (20), wherein the hub body (22) has a first end (17) and a second end (18). The hub body (22) has a pair of axially spaced hub flanges (13,15). A plurality of bearings (54) disposed between the hub body (22) and the hub spindle (20) for rotatably supporting the hub body (22) relative to the hub spindle (20). A freewheel (24) disposed on a first side (14) of the hub body (22), and the freewheel (24) is adapted to mount a plurality of sprockets (19a). In regards to claim 7, a cover member (51a,51b) detachably coupled to the at least one of the first end and the second end of the hub body (22). In regards to claim 8, the opening (74) and the cover member (51a, 51b) are disposed at the first end of the hub body (22), and wherein the freewheel (24) is mounted to the cover member (51a, 51b). In regards to claim 9 and 14, the hub body (22) has a threaded portion (34) that engages a threaded portion (72) of the cover member. In regards to claim 10 and 15, the hub body has a female threaded portion that engages a male threaded portion of the cover member. In regards to claim 11 and 16, the female threaded portion is a right- hand threaded portion. In regards to claim 12, the opening and the cover member are disposed at the second end of the hub body. However, Kanehisa et al. does not disclose a generator.

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3. Iton discloses a generating mechanism (30) disposed between the hub body (1) and the hub spindle (98) in order to generate electricity and to adjust the brake force. The generating mechanism (30) generates electricity in response to rotation of the hub body (1) relative-to the hub spindle (98). In regards to claim 2, a brake device-mounting (40) member disposed on a second side of the hub body (1). In regards to claim 3, a brake disk coupled to the brake device-mounting member. In regards to claim 4, a brake drum (86) coupled to the brake device-mounting member (40). In regards to claim 5, a roller brake (80) coupled to the brake device-mounting member (40). In regards to claim 6, the hub body (1) includes an opening disposed on at least one of the first end and the second end of the hub body (1), wherein the opening is dimensioned for receiving at least a portion of the generator (30) (see figure 5). In regards to claim 13, a brake device-mounting member (40) disposed on the cover member.

In regards to claim 19, the generating mechanism has a magnet (37) disposed on an inner peripheral surface of the hub body (1) and a stator unit (31,32) disposed radially inwardly of the magnet (37).

4. Since Kanehisa et al. and Iton are from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the other.

5. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the bicycle with a generator as taught by Iton for the purpose discussed above.

Allowable Subject Matter

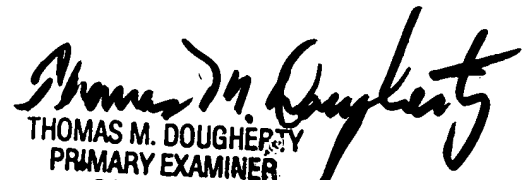
1. Claims 17-18 and 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. In regards to claim 17, prior art does not disclose a hub body a first cylindrical portion that houses the generating mechanism; and a second cylindrical portion having a smaller diameter than the first cylindrical portion.
3. Claim 18 is allowed for being depended upon allowable claim 17.
4. In regards to claim 20, Prior art does not disclose a coil disposed radially inwardly of the magnet; a yoke surrounding the coil, wherein the magnet rotates relative to the yoke around an axis, wherein the yoke comprises: a plurality of laminated first yoke arms disposed on a first axial side of the coil, each first yoke arm having a first yoke arm radially outer portion and a first yoke arm radially inner portion, and each first yoke arm comprising a plurality of laminated first plate-shaped pieces; a plurality of laminated second yoke arms disposed on a second axial side of the coil, each second yoke arm having a second yoke arm radially outer portion and a second yoke arm radially inner portion, and each second yoke arm comprising a plurality of laminated second plate-shaped pieces; wherein each first yoke arm radially inner portion faces a corresponding second yoke arm radially inner portion in the axial direction; wherein the plurality of first yoke arm radially outer portions extend axially toward the second axial side of the coil; wherein the plurality of second yoke arm radially outer portions extend axially toward the first axial side of the coil; and wherein the plurality of

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first yoke arm radially outer portions are interleaved with the plurality of second yoke arm radially outer portions in a circumferential direction.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (571) 272-2023. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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